

IN THE CLAIMS

1. (currently amended) A transmitting diversity system with a base station transmitting signals from a plurality of antennas and performing diversity transmission according to feedback data transmitted from a mobile node receiving the signals, comprising:

a signal condition detection unit detecting the condition of a signal transmitted from each of the plurality of antennas;

an antenna selection unit selecting an antenna for which a control weight is calculated, from the plurality of antennas;

a control weight unit calculating only a control weight applied to the selected antenna and applying the control weight to signals transmitted from the selected antenna; and

a switch unit routing input signals to each of the plurality of antennas and disconnecting the antenna, wherein

said control weight unit fixes the control weight of an unselected antenna to a current value, and

~~said antenna selection unit turns off a corresponding switch so that no signals can be transmitted from the unselected antenna.~~

2. – 3. (canceled)

4. (original) The transmitting diversity system according to claim 1, wherein said signal condition detection unit measures propagation loss, fading frequency or correlation coefficient between antennas of an incoming signal.

5. (original) The transmitting diversity system according to claim 1, wherein said signal condition detection unit is provided for the mobile node.

6. (original) The transmitting diversity system according to claim 1, wherein said signal condition detection unit is provided for the base station.

7. (original) The transmitting diversity system according to claim 1, wherein the plurality of antennas are provided for a plurality of base stations, and said antenna selection unit also selects a base station to communicate with by selecting an antenna with a controlled weight from the plurality of antennas and making possible a handover process accompanying the travel of each mobile node.

8. **(currently amended)** A transmitting diversity method with a base station transmitting signals from a plurality of antennas and performing diversity transmission according to feedback data transmitted from a mobile node receiving the signals, comprising the steps of:

detecting the condition of a signal transmitted from each of the plurality of antennas;
selecting an antenna for which a control weight is calculated, from the plurality of antennas; and

calculating only a control weight applied to the selected antenna and applying the control weight to signals transmitted from the selected antenna; and

routing input signals to each of the plurality of antennas and disconnecting the antenna (switch step), wherein

in the ~~control weight step~~ of calculating and applying the control weight, the control weight of an unselected antenna is fixed to a current value, and

~~in the antenna selection step, a corresponding switch is turned off so that no signals can be transmitted from the unselected antenna.~~

9. – 10. (canceled)

11. **(currently amended)** The transmitting diversity method according to claim 8, wherein in the ~~signal condition detection~~detecting step, propagation loss, fading frequency or correlation coefficient between antennas of an incoming signal is measured.

12. **(currently amended)** The transmitting diversity method according to claim 8, wherein the ~~signal condition detection~~detecting step is performed in the mobile node.

13. **(currently amended)** The transmitting diversity method according to claim 8, wherein the ~~signal condition detection~~detecting step is performed in the base station.

14. **(currently amended)** The transmitting diversity method according to claim 8, wherein
the plurality of antennas are provided for a plurality of base stations, and
in the ~~antenna selection~~selecting step, a base station to communicate with is also selected by selecting an antenna with a controlled weight from the plurality of antennas and making possible a handover process accompanying the travel of a mobile node.